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COUNTY MUSEUM

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LOS ANGELES COUNTY MUSEUM

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NEWS OF THE MUSEUM

MUSEUM FACADE

The central portion of the Museum facade has been finished, and contracts for the completion of the two wing facades will be let before the end of the current fiscal year. The great depression of the early 1930's struck just as the latest units of the Museum were nearing completion, and thus the main facade was left unfinished. By this happenstance, the Museum avoided a marble and granite neo-classic facing fronted with marble columns, and today is being given a very simple and relatively inexpensive contemporary architectural treatment.

MUSEUM BOOKSHOP

The Museum's new bookshop which opened in the late autumn, is doing a thriving business. "Bookshop," however, is a misnomer, for this attractive store carries color slides, reproductions, prints, post-cards, models of prehistoric animals, as well as pamphlets, catalogues and books.

NEW MUSEUM HOURS

The new visiting hours at the Museum — 10 A. M. to 5 P. M. every day except Thanksgiving and Christmas — are being well received by the public. Week-end attendance continues to increase, and approximately 6,000 visitors have come to the Museum each Sunday since the new schedule went into effect at the first of the year.

DOCUMENTARY FILMS

The documentary film series continues at the Museum each Saturday at 2:30 P. M. A monthly program of Museum documentaries is being presented at the Long Beach Public Library, a service underwritten by the Museum Association as an experiment to determine whether or not decentralization of some of the Museum services might be both feasible and desirable.

CHAMBER MUSIC

Tape recordings of the Museum's year-round Sunday afternoon chamber music concerts are being distributed in fifty-one cities across the land. Stations KFAC-AM and FM, and KUSC-FM broadcast the program locally to an audience which is estimated to run into the tens of thousands.

AMERICAN ART GALLERIES

A renovation and rearrangement of the second-floor Art galleries, to present the Museum's permanent collections of American paintings and sculpture in a circuit of eight galleries, is largely completed. The west galleries will be re-installed with the study-collections of Decorative Art — American and English silver, and early American furniture and textiles, glassware and smallwork of the household.

OUTDOOR SCULPTURE GALLERY

Plans for a second-floor outdoor sculpture gallery are underway, and the contract will soon be let. As a setting for the Museum's collection of sculpture of the Middle Ages and Renaissance, the gallery will be provided with special ceiling lighting suited to the illumination of sculpture, and a new concrete floor will be installed. To highlight the open-air mood of the gallery, low trellises are being installed against the north wall.

HALL OF THE AMERICAN INDIAN

Work on the new Hall of the American Indian is proceeding rapidly. Installation is two-thirds completed, and an opening date in the very near future is anticipated.

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THE EVOLUTION OF THE COWBOY'S CHAPS

IN THE HALCYON DAYS when California was a robust youngster riding high in the saddle, men lavished much care and pride upon their riding gear. Among the items which all Californios used were the *armas* or *defensas*. These protective leg coverings were destined to become one of the most picturesque bits of cowboy costume some one hundred and eighty years later, albeit in a somewhat altered form.

The first *armas* worn in California were those used by the Leather Jacket Soldiers who accompanied the Portola expedition along the coast in 1769. Those garments consisted of two separate pieces of dressed cow or goat skin which were tied to the saddle horn with buckskin thongs and hung down over each leg of the rider to protect him from the rasping thorns of the cactus and the whipping of the tough chaparral. Unlike the later types of leg coverings of the *vaqueros* (cowboys), the *armas* or, as they were sometimes called, the *defensas* (armor or protectors), were never attached to the bodies of the *caballero* or soldier but always remained tied to the saddle.

One pair of these *armas* which has survived the hard usage of a century or more, but whose history is unknown, was obtained by the Chief Curator of History in Santa Fe, New Mexico, in 1947.

These *armas* (FIG. 1) are made of goat skin, tanned with the hair on, and were known as *armas para agua* (water-proof coverings). Each of the sections is three feet long and twenty-six inches wide across the top. They are somewhat frayed at the bottom and the hide is beginning to split with age. A band of floral embroidery, four inches wide, ornaments the upper portion of each piece. The embroidered shield is eight inches long. The decorations are done in heavy hemp thread, now colorless, the hues having long since faded. (FIG. 1 indicates this ornamentation and the stitches used.) At one time the decorative effect was enhanced by inserts of red *bayeta* (baize) along the top and down the sides, but only small remnants of this textile now remain to indicate its former colorful presence.

The *armas* are also bound across the top and part of the way down the sides with pieces of hide, and semi-circular pieces of skin have been cut out near one corner, at the top, thus permitting the skins to fit more snugly around the neck of the saddle horn. The *armas* were held in position on the saddle by very thin buckskin thongs, and when the rider was seated, he tied the rear thongs at the back of his waist. These cords were strong enough to bear the weight of the *armas* yet light enough to break free if the rider were suddenly thrown from the saddle.

On the under-side of each covering is a deep, narrow pocket of soft, tanned leather deerskin, ten inches deep and eight and one-half inches wide. A lining of thin deerskin, eighteen inches wide, extends clear across the upper portion of the *armas*.

Although the hairy *armas* were commonly used only during cold or rainy weather, they might be worn at other times as well. Generally, however, *armas* made of heavy pieces of tanned bull hide, either plain or ornamented across the top in the style already described, were used by riders bucking the heavy chaparral. Said Archibald Menzies who visited California in 1793, describing the soldiers at the Presidio de Monterey:

"These Soldiers are generally stout Men capable of bearing great fatigue & without any exaggeration the most dextrous & nimble Horsemen we ever saw. . . . They have a kind of Apron of thick leather fastened to the pummel of the Saddle & falling back on each side covers the Legs & Thighs & affords considerable defense either passing through thorny brush woods with which the Country abounds, or from such Weapons as the Indians generally make use of."[1]

Coexistent with the *armas* used by the border soldiery during the middle of the 18th century was the *coraza*, another type of protective leather armor which covered both man and mount, and which was used particularly in the harsh, rugged lands of Sonora and Chihuahua. This trapping was on the order of the ancient barding or war armor used in Europe two to three centuries prior to the conquest of the New World. The ancient armor was made of steel or boiled leather, but

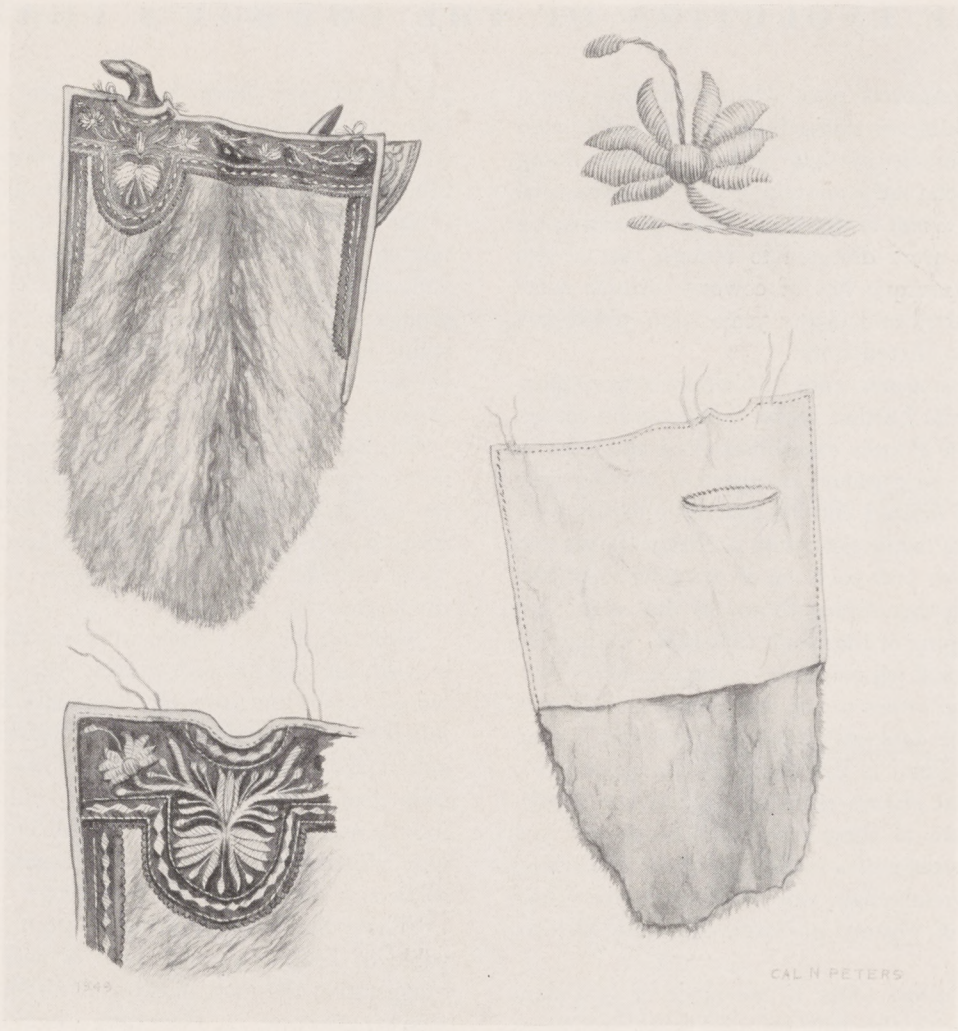

FIG. 1—Goatskin *armas* from New Mexico: face and reverse, with details of embroidery

the Mexican horse *coraza* of the 17th and 18th centuries was apparently constructed of heavy bull hide. It sheathed the horse from breast to rump and would turn not only the thorns of the brush-clad mountains and desert, but also the glancing shafts of Indian warriors.

I understand that a modified form of this horse armor is still used in certain portions of Mexico. FIG. 2 is a sketch based upon an 18th century Mexican drawing done on buffalo hide, which is now in Switzerland. Here, in effect, is the forerunner of both the *armas* and the *anquera* (rump covering), as well as the *coraza* and *mochila* (two types of saddle coverings). It will be noted that the rider's legs are covered by the heavy hide. In this aspect it differs from the more ancient barding in that the armored knight was not pinned down by the horse armor. His saddle was over, not under the armor, as was the case in the 18th century Mexican trapping.

The *armas* continued to be worn in Mexico and all her outlying provinces until the middle 1850's. As a matter of fact, like the *coraza* for the horse, the *armas* survive today in the wilder

parts of Mexico, particularly in the states of Jalisco, Guerrero and Oaxaca, where the *vaqueros* of the *monte* still follow the trade of their forefathers.

Brantz Mayer, who traveled in Mexico in the 1840's, described a horseman and his accoutrements — a description which would have fitted the native cowboys of Alta California equally well:

"In front of him are his *armas de agua* — a large skin cut in two parts, the ends of which on one side are fastened to the saddle bow, and the other two being tied behind him so that his legs are entirely protected from the rain."[2]

The *armas* (Fig. 3) likewise have the small cords attached in front where they were fastened to the saddle horn, and also at the rear where they were tied around the rider. Almost all of the pictures of *vaqueros* and *hacendados* painted in Mexico during the 1820's to 1850's show the horsemen with *armas* on their saddles.

Armas were made by the neophytes at the missions of California in great numbers during the early 19th century. The account books for La Purisima Mission (1810-1826) indicate that *armas* sold for the relatively small sums of four to six pesos during that period.

In the late 1830's and early 1840's, another

Fig. 2—Sketch taken from an 18th century Mexican drawing done on buffalo hide

Fig. 3—Style of *armas* worn in the late 18th and early 19th century

type of leg covering began to appear in California. These were the *armitas*, or "little *armas*." They were shorter and lighter, and were a great favorite of the *vaqueros*. According to Bancroft, the *armitas* consisted of "two pieces of well tanned deerskin, very soft, stitched to a narrow belt of the same skin, which was tied around the waist; each of these fell over the thigh below the knee and was fastened underneath with small thongs. These were called *armitas* and were used when they entered the corrals to lasso cattle, the *armitas* protecting the breeches from the chafing of the rope."[3]

William Redmond Ryan, a visitor to California in 1848-49, naturally took great interest in his new surroundings, and he mentioned that as he left Monterey, he encountered a singular-looking individual:

"He was a man below the middle height, dressed in a short jacket partially covered with fur, his legs being encased in leathers reaching to the knees, a costume adopted by the Californians to protect their calcineros on a long journey."[4]

There is a possibility that Ryan in this instance was speaking of the leather *botas* or leggings, but he may have meant the *armitas* since the *botas*, as a rule, were worn under the *calzoneras* and not over them.

The reasons for adopting the *armita* were set forth by Allan Owen in an article "The Last of the Vaqueros," in which he described the use of this protective covering by the native California

cowboys in the Cuyama Valley, Ventura County, in the 1890's:

"The use, therefore, of the raw-hide apron (*armos*) worn by the *vaqueros* in the mountains will be self-evident. They take the place of chaparejos, over which they possess several advantages, not the least being their greater coolness, and the facility with which they are donned and doffed. Tanned buck or sheep skin, capable of turning mesquite, grease-wood, or sage would not prevent scrub oak from wrenching a rider's knee-cap well nigh out of its socket or the burned stubs penetrating the leather and the horseman's flesh."[5]

Here, the author has confused the *armita* with the *arma*, but the artist, Alexander F. Harmer, who drew the sketches accompanying the article, made no such error. The horsemen in Harmer's illustrations are shown definitely wearing *armitas* —the pieces of tanned leather reach nearly to the ankles, and are tied with a buckskin thong behind each knee.

It is possible that the use of the *armitas* spread from California into Nevada sometime during the 1880's or 1890's. Maynard Dixon and his contemporary, Ed Borein, who specialized in cowboy sketches, were just coming into their own during the late 1890's and early 1900's. Dixon's illustration of a Nevada cowboy in the June, 1902 issue of *Sunset* is a good example of the use of the *armita* in that state.[6] The late Jo Mora was also familiar with the *armitas* or "chinks" as he preferred to call them. As a cowboy-artist, he had both worn them and sketched them in use, and he, too, made the statement that he liked them because of their coolness. Percy Bonebrake, an ex-cowboy of the 1890's, now living in Sierra Madre, has a pair of *armitas* which he made in 1915. His preference for these leg coverings was also dictated by the fact that they were lighter and cooler. He, however, sewed metal snaps on his pair, instead of the regulation buckskin thongs.

Eventually the modern *chaparreras* or chaps evolved out of the *armitas* and the *calzoneras* or *calzones* (trousers) worn by the Mexicans circa 1824 to 1870. The term *chaparrera* is derived from the word *chaparro,* which in Mexico may mean any number of species of trees or brush, hence the word *chaparral* (any region heavily covered with brush). Thus *chaparreras* came to mean leggings worn as a protection against the thorns and brush. The first mention of the word *chaparreras* which I have been able to find occurs in an article, "Los Rancheros," by Domingo Revilla, published in *El Museo Mexicano,* in 1844.[7] This item is in a series of short articles treating the native customs and dress of Mexico, and in it Revilla describes the garb of the *vaqueros* or *rancheros* of his day. He mentions the fact that the *rancheros* wear a long *cuera* (leather coat), but he continues: "The *cuera* is falling into disuse. The *chaparreras*, on the other hand, are in vogue in all parts of the Republic, especially those made of goat skin which shed water. They consist of *calzones* with buttons down the sides and have no seats in them. In the Jaral and the interior, those made of tanned cow hides are most in demand as being of the greatest usefulness."

Here we have the first accurate description of these leather leggings which have become standard equipment of the cowboy of the United States. The Mexican author states the first ones were leather *calzones* or breeches, with buttons down the sides. The ordinary long trousers of this period were open down both sides and as a rule they were made of cloth or thin, soft leather, called *gamuza.* They were fastened with silver, brass, horn or leather buttons. They were part of the male costume of the day, hence it is not difficult to imagine the transition of a pair of soft, thin trousers into something more rugged like the *chaparreras.* However, since the latter had no seats in them, the wearer had to have a pair of cloth *calzones* or a pair of regular *calzoneras* under the leggings.

The earliest picture of *chaparreras* which I have seen appeared in the second edition of *Mexico y Sus Alrededores* published in Mexico in 1864.[8] The first edition appeared in 1856. A colored lithograph showing horsemen wearing

FIG. 4—Horsemen wearing goatskin *chaparreras* (drawn from a colored lithograph by C. Casto, 1864)

the goatskin *chaparreras* was drawn by C. Casto. FIG. 4 is a sketch by Cal Peters based upon the original lithograph.

Oddly enough, the term *chaparreras* does not appear in the vocabulary of the Texas cowboy until well into the latter half of the 19th century. In Texas, where the Spanish tongue was a second language of the land, and the gear used by the cowmen was borrowed almost *in toto* from the Mexican *vaqueros,* the *chaparreras* were known simply as leather leggings. A more familiar word used extensively at the present time by cowboys north, south and west, is *chaparejos.* This, I believe, is a mongrel word, based upon *chaparreras,* which originated with the cowboy in the United States sometime in the 1870's or 1880's. Theodore Roosevelt spelled the word "*chaparajos*" in his "Ranch Life in the Far West," in *The Century* of February, 1888.[9] I have not been able to find it in any reliable Spanish dictionary nor in any of the dictionaries pertaining to colloquialisms in the Spanish-American countries. Hence one is forced to conclude that, like many another word adopted by the American cowboys north of the Rio Grande, it has undergone phonetic and orthographic changes. The

word most commonly used for the *chaparreras* or *chaparejos* is an Anglicized abbreviation, "chaps" —also spelled "schaps" and "shaps."

Thus we have Frank Russell in his *Trails Ploughed Under* commenting upon the different breeds of cowboys:

"Texas an' California bein' the startin' places made two species of cowpunchers, those west of the Rockies rangin' north usin' centrefire or single cinch saddles with high fork an' cantle; packed a sixty or sixty five foot rawhide rope, an' swung a big loop. Their *chaparejos* were made of fur or hair, either bear, angora goat or hair sealskin.

"The cowpuncher east of the Rockies originated in Texas an' ranged north to the Big Bow. . . . Their *chaparejos* were made of heavy bullhide to protect the leg from brush an' thorns, with hogsnout *tapaderos*."[10]

In his book *The Cowboy,* Philip Ashton Rollins gave his formula for making a pair of chaps:

"Take a pair of long trousers of the city, cut away the seat, sever the seam between the legs, and fasten to a broad belt buckled at the wearer's back as much of the two legs as is thus left. Then you have a pattern for a pair of chaps. Reproduce your pattern in either dehaired, heavy leather, preferably brown, but black if you must, or else in a shaggy skin of a bear, wolf, dog, goat or sheep, and you have the real article. You must, of course, make your pattern very loosely fitting, have on the length of each leg but a single seam, and that at the rear, and do a bit of shaping at the knee. Should you employ dehaired leather, so cut it that long fringe will hang from the leg seam, and you might well cover this seam with a wide strip of white buckskin. You will hurt nobody's feelings should you stamp the leather here and there with frontier animals or with women's heads, or all over in tiny checker-board or should you stud the belt with conches. In so doing you will be no inventor, but merely a follower of customs."[11]

The earliest pictures of Texas chaps indicate that they were simple, straight leggings—"shotgun chaps" as they were called. They were either plain or ornamented along the seams with short fringes. Apparently the first ones had no pockets. Later, large, pouch-like covered pockets of leather, with flaps fastened by leather buttons, were sewed on each leg. At first, the gun belts were separate, but in later days fixed cartridge loops were sometimes sewed to the waist-band of the chaps. Such little touches were, however, individualistic, and were not seen on the average run-of-the-mill leggings.

About 1895 or 1896, the first wings began to appear on the legs of the chaps. These were developed in Texas and spread west into Arizona, and later into California and north into Wyoming and Montana. Gradually these wings grew until the familiar "bat wing" wide, floppy things came onto the scene during the first two decades of the 20th century.

The hairy chaps, direct descendants of the *chaparreras de agua* of Mexico, found more favor in the northern cattle ranges, where there was more rain, snow and cold weather, than they did in Texas or California. At the outset, these *chivarras* as the Mexicans called them (a term derived from the Spanish word *chivo,* meaning goat), were relatively simple but they too "went modern." The hides of angora goats with long curly hair became high cowboy fashion. Some of these were dyed red, yellow, or other colors, or were sometimes spotted. At the height of their fashion, during the first decade of the 20th century, they were so large that the wearers waddled like overstuffed teddy bears when they walked.

Such chaps were seldom worn as work clothes but were fashionable as dress garments and were seen at professional rodeos or circuses. When wet, they were decidedly malodorous, especially when the owner walked into a warm room. Small boys followed these shaggy pants down the street at respectful distances, "baaa-ing" softly, like sheep, much to the annoyance and disgust of the wearers. (It might be mentioned that the word *chivarras* applied to goatskin *chaparreras* is correct, but when applied to any kind of plain leather chaps, is incorrect.)

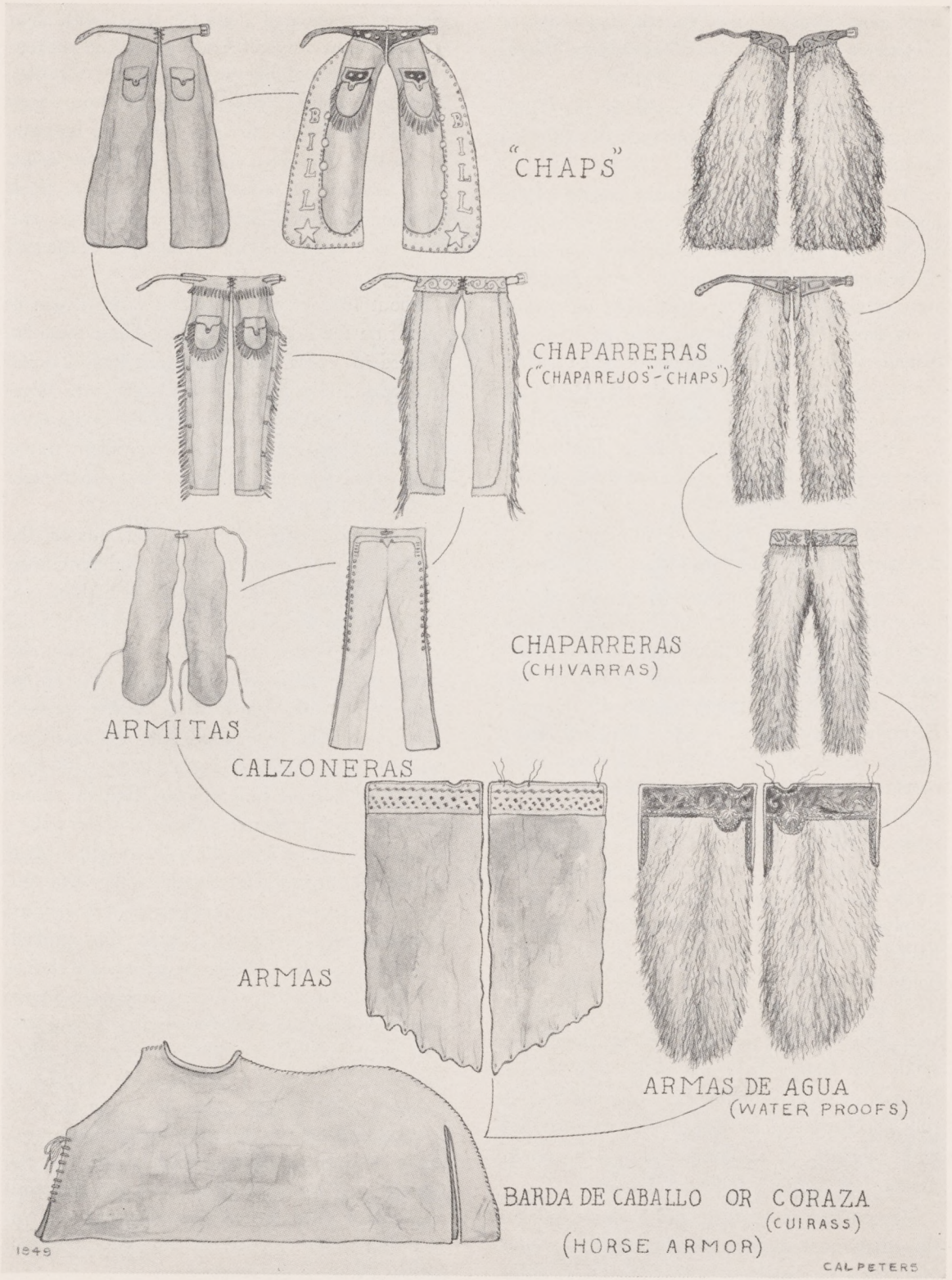

FIG. 5—The family tree of the *chaparreras*

FIG. 5 shows the family tree of the *chaparreras*. The series begins with the ancient *coraza* or *cuirass* which protected both man and beast, thence to the *armas, armitas* and the *calzoneras* and then to the *chaparreras* which developed in Mexico during the early 1840's and spread northward. There were many local variations and preferences as to weight and kind of leather, but all of these are step-children of the original Mexican garments and horse trappings first used by the hard-riding *vaqueros* of Old Mexico, and as such are important only in that they are legal progeny of an ancient and honorable line.

—ARTHUR WOODWARD

NOTES:

[1] Archibald Menzies, "Journal," *California Historical Society Quarterly,* II (Jan., 1924), 294-5.
[2] Brantz Mayer, *Mexico as It Was and Is* (New York: J. Winchester, 1844), p. 163.
[3] H. H. Bancroft, *Pastoral California* (San Francisco: The History Company, 1888), p. 379.
[4] William Redmond Ryan, *Personal Adventures in Upper and Lower California in 1848-49* (London: Shoberl, 1850), I, 225.
[5] Allan Owen, "The Last of the Vaqueros," *Overland Monthly* (March, 1896), p. 253.
[6] *Sunset,* IX (June, 1902), 82.
[7] Domingo Revilla, "Los Rancheros," *El Museo Mexicano* (Mexico City: Ignacio Complida, 1844), III, 553.
[8] J. Decaen, ed., *Mexico y Sus Alrededores* (Mexico: Decaen, 1864), 28th pl.
[9] Theodore Roosevelt, "Ranch Life in the Far West," *The Century,* XXXV (Feb., 1888), 502
[10] Frank Russell, *Trails Ploughed Under* (New York: Garden City, 1941), p. 3.
[11] Philip Ashton Rollins, *The Cowboy* (New York: Scribner, 1922), pp. 116-7.

THE PORTRAIT OF MATHILDE LINTERMANS

An important addition to the Museum's collection of Flemish seventeenth century paintings is the full-length portrait of *Mathilde Lintermans and Her Two Children* by Cornelis de Vos (1585-1651), given by the Hearst Corporation.[1]

Cornelis de Vos was, next to Rubens and Van Dyck, the leading portrait painter of the Antwerp School, his fame resting upon single portraits and family groups of the rich burghers of the city. He was highly appreciated by Rubens. If Rubens had too many orders to execute, he referred his patrons to Cornelis de Vos, saying that de Vos could carry out the commission just as well.

De Vos was at first greatly influenced by Rubens, whose assistant he seems to have been from time to time, and he later came under the influence of Van Dyck. Our painting belongs to this later period, as is proved by the exaggerated length of the figure, and the composition with the column and the curtain in the background, all pointing to Van Dyck. The artist shows his best side in the portrayal of the two children, both beautifully dressed, the boy holding a feathered hat in one hand, and reaching with the other for an apple which his sister offers him. The playful attitude of the children is in contrast to the austere, autocratic pose of the mother, who stands behind the children as if protecting them. De Vos was especially noted for painting charming portraits of children, and his portrait of two little girls, in the Berlin Museum, is often reproduced.

Drawing, a study by de Vos for his *Mathilde Lintermans*
(From the Museum at Lille)

The portrait of Mrs. Lintermans was hung with a companion piece—a portrait of her husband—in the exhibition of Flemish paintings at Brussels, in 1910. At this time the two paintings belonged to the collection of Baron Maximilian van Erp in Rome. The companion piece, representing Jan de Bierens, is not as fine in quality as our painting, and has been attributed to another artist of lesser importance than de Vos.

The close relationship between de Vos and Van Dyck can be demonstrated by the fact that a drawing for our painting, which was always attributed to Van Dyck, exists in the Museum at Lille. In recent times, after our portrait became better known, it has been shown convincingly that the drawing is a study by de Vos for our painting. Dr. G. Glück, former director of the Vienna Museum and now a resident of Los Angeles, has published a special article on the relation between the drawing and the painting, in his book on Rubens and Van Dyck.[2]

De Vos is represented in the Metropolitan Museum by a family portrait, dated 1622; and by single portraits of women in the John S. Johnson Collection, Philadelphia, and the St. Louis Museum. The artist became well-known in this country through the portrait of Abraham Grapheus, courier of the Antwerp Guild of St. Luke, dated 1620, which was sent from the Antwerp Museum to the New York World's Fair in 1939 and later traveled the country with other Flemish paintings from European museums. This was one of the

Cornelis de Vos (1585-1651)—*Mathilde Lintermans and Her Two Children*
Gift of the Hearst Corporation

paintings taken to Paris in 1794 by the French Revolutionists, but returned to Antwerp in 1815 by order of Louis XVIII.

The portrait of Mathilde Lintermans is now exhibited in the entrance hall of the Museum, a pendant to the fine full-length portrait of Lieutenant Legrand by Baron Gros, acquired by the Museum in 1949.

—W. R. VALENTINER

[1] A.5933.50-66, canvas 51½ x 90 inches.
[2] Glück, *Rubens, Van Dyck und ihr Kreis* (Vienna: Schroll, 1933), pp. 337-341.

A LENDING COLLECTION OF FINE REPRODUCTIONS "INNOVATORS IN ART"

THROUGH THE GENEROSITY of the members of the Museum Association, a collection of fine prints illustrating the history of traditional European art has been purchased by the Division of Education. It will serve as the first of a series of circulating exhibitions available through the Lending Service. Libraries, community art associations, women's clubs and service organizations, as well as schools, are the public for whom the pictures are intended. Later on, if the response is sufficiently enthusiastic, the Division hopes to add a collection representative of the late Eighteenth and the Nineteenth Centuries, and another to illustrate Modern and Contemporary periods. The cost of the prints, and the care which have gone into their mounting, make this Exhibition the most valuable of the displays to go out through the Lending Service.

Young Man Aged Twenty Eight, by Hans Holbein the Younger (1541). From the Belvedere collection in Vienna. A Jaffé 320 reproduction

It is planned to serve two general groups of people: students in senior high school and college, and adults without professional training in the field of art appreciation and history. With explanatory labels written in non-technical language, the collection is to all intents a self-teaching experience, and an outline of the developments that composed the core of the European tradition in painting.

Thirty reproductions display in chronological order the most important innovations from Giotto's concept of the solidity of forms to El Greco's incandescent light. The greatest names are represented by com-

plete paintings, details, or drawings. Duccio and Simone Martine introduce the series with a *Madonna and Child*, and an *Annunciation*. Then, going back to Gothic origins, the observer is led by Cimabuë, Giotto, Fra Angelico, Van Dyck on through the Renaissance and Baroque periods to examples from the hands of Guardi and Goya.

To quote from one of the labels, "A reproduction is a little like a map. It gives you the main features of the painting—the plan, an idea of the color, perhaps an inkling of the technique. It makes you acquainted with the artist, even if it doesn't make you understanding friends." Because these reproductions are exceptionally good, they can give a helpful appreciation of the artist's purpose. Roberto Hoesch, the Alinari Company, Twinprints, the Medici Society, Seeman of Leipzig, the Pallas Gallery of London and similar publishing houses made the reproductions. Many of them are now out of print; in some cases the houses were destroyed in the war.

The Division of Education is grateful to the Museum Association for having made possible the circulation of so fine a set of prints. It provides one more avenue through which to strengthen the values for which the Museum exists—an increasing understanding of the world, and of man's part in it.

—Frances Roberts Nugent

CHESTER STOCK

January 28, 1892—December 7, 1950

On the seventh of December, last, Dr. Chester Stock, associated with this Museum since 1918, and Chief of the Division of Science since 1949, died at his home in Pasadena.

Dr. Stock was particularly famed as an authority on the Rancho La Brea asphalt deposits in Los Angeles. His sphere of interest and achievement, however, included the investigation of many other fossil fields. His knowledge of the significance of fossils in studying the rocks of the earth led to his appointment, during the last war, to a post with the United States Geological Survey. There was no one who had a wider understanding of the mammal-bearing fossil localities in California. His investigations carried him, also, to neighboring states and into Mexico. His publications numbered over a hundred and sixty. As Chief of the Science Division of the Los Angeles County Museum he directed the unified effort of the division's eight sections in laying plans for a large biological hall (the Hall of Evolving Life) dealing with the fundamental trend of all living things to undergo change.

Recognition came to Dr. Stock from many sources. For nearly twenty years (1925-1944) he was research associate with the Carnegie Institution of Washington; for two years (1939-1941) he held a Guggenheim Fellowship, working with the Geological Institute of Mexico. He was a Fellow of the American Academy of Arts and Sciences, a member of the American Philosophical Society and of the National Academy of Sciences, and was active, as well, in a large number of scientific societies devoted to geology, paleontology and the biological fields. He was President of the Paleontological Society in 1945, and of the Society of Vertebrate Paleontology in 1947. In 1947 he became Chief of the Division of Geological Sciences at the California Institute of Technology. His most recent honor and responsibility came to him less than a month before his death, when he was elected president of the Geological Society of America.

Dr. Stock's greatness reached far beyond his professional life. He excelled, as well, in friendship. He was beloved by all who knew him for

his good fellowship, his kindness, and his delightful sense of humor. His friends at the Museum began with the shipping clerk at the employees' entrance, included the maintenance staff, the guards, the elevator and telephone operators, and of course, the members of his own divisional staff, as well as the Director.

Chester Stock's success was largely won by his own efforts, but he himself would say that his mother's faith in him and her sympathetic understanding of his ambitions laid the foundations of his achievement. John Englebert and Maria Henriette Stock, Chester's parents, were Bavarian born. They met and married in San Francisco in 1885, and there established the home where Chester and his brothers and sisters were born. Like many another American boy, Chester sold newspapers as a lad, and played in a band which netted him a little extra money. In 1906, the earthquake and fire completely destroyed the parental home, and to a certain extent dampened the spirit of the elder Stocks. Chester dropped out of school for a period, and went to work. Realizing the importance of an education, however, he made up his mind to resume his schooling. With his mother's encouragement, he completed his unfinished years at high school, and entered the University of California at Berkeley in 1910 as a premedical student.

It was a year or two later that Chester came in contact with Professor John C. Merriam, eminent Vertebrate Paleontologist, then at the University. Work at Rancho La Brea was at its height at this time, and other important fossil discoveries of cave deposits had been made in northern California. The possibilities of a fascinating new field of thought opened before Chester Stock, and he determined that here, rather than in medicine, lay his future.

Transferring his college "major" to paleontology, he maintained a "minor" in the zoological studies which he had already begun as a part of

the premedical training. He therefore became well grounded in the principles of biology so important to a proper interpretation of extinct forms. In May, 1914, he received the degree of Bachelor of Sciences, and immediately proceeded with work for the doctorate. At this time he was awarded a University Fellowship in Paleontology, and for the two years following (1915-1917) became a James M. Goewey Scholar. He was, therefore, able to meet most of his own expenses throughout his graduate years of study.

On May 3, 1917, a University Committee composed of eminent zoologists, geologists and paleontologists, met to examine Chester Stock as a candidate for the degree of Doctor of Philosophy. The thesis which he defended at this time concerned "The Pleistocene Fauna of Hawver Cave," later published in the University of California Bulletin of the Department of Geology. Even before this examination, however, Stock had seven publications to his credit, six of which dealt with the fossils from Rancho La Brea.

Already well acquainted with procedure in the Paleontology Department at the University of California, Dr. Stock became a member of the faculty upon receiving his doctorate. From 1917 to 1919 he served as Assistant in Paleontology; from 1919 to 1921 as Instructor, and from 1921 to 1926 as Assistant Professor.

The University encouraged vacation field-work in geology and paleontology. Hence, while still a student, Stock, with other young men studying under Dr. Merriam, visited (among other west coast localities) the Rancho La Brea deposits, and helped with the excavations being carried on there by the University. Later, when the Los Angeles Museum amassed its tremendous collections from the pits, Stock began visiting the Museum to study the material as it was being sorted here. In May, 1918, he was put on the staff of the Museum as Paleontologist on a per diem basis, coming to Los Angeles from San Francisco to work during the University's vacation periods. His first great interest lay in examination of the remains of the ground sloths from the pits. His monumental work on these forms, published in 1925 by the Carnegie Institution of Washington, was the result of long hours of study, and measurements of hundreds of bones of sloths here at the Museum as well as in the smaller collections at the University in Berkeley.

Following his investigations of the sloths, Dr. Stock undertook, in collaboration with Dr. Merriam, a study of the cat family. This culminated in the publication of a joint monograph in 1932. Dr. Stock's particular studies centered around the Saber-tooth Cat. Early in his work with this group, the Museum was preparing to assemble and mount a specimen of the Saber-tooth. Dr. Stock not only aided in the assembling of the material, but from a small sum granted him as a research fund by the Carnegie Institution of Washington, paid for student help to further the project. It was in this manner that the present writer, then a student at the Southern Branch of the University of California, first met Dr. Stock, and continued to work with him both at the Los Angeles Museum and also on the Berkeley campus.

In 1926, the California Institute of Technology offered Dr. Stock a professorship in Paleontology, which he accepted. Having married in 1921, he brought with him to Pasadena his wife, the former Clara Margaret Doud, and three-year-old daughter, Jane Henriette. Not long after the move to southern California, a son, John Chester, was born. A very happy home life was broken up, a few years later, by the death of Mrs. Stock.

At the California Institute of Technology, the Division of Geological Sciences had been only recently established. Dr. Stock set to work enthusiastically building up the section of Vertebrate Paleontology. By instituting an active field program, the collections began to increase rapidly. Students were attracted to the Institute seeking the benefits to be derived from close association with Professor Stock. And meanwhile, he himself continued a vigorous application to research in fossil mammals from a widening field of discoveries. The Rancho La Brea collections at the Los Angeles Museum presented an ever-present storehouse of possibilities for investigation, and a point of comparison for other deposits of like age. Several important cave sites comparable in age to the La Brea deposits were discovered during the 1930's. In these, evidence

of man was found in association with extinct animals. The now famous Gypsum Cave (Nevada) occurrence was studied by Dr. Stock in collaboration with archeologists of the Southwest Museum. Conkling Cavern and Shelter Cave in New Mexico were Los Angeles Museum projects, which Dr. Stock largely supervised.

Living as he now did, in Pasadena, the Museum was within easy reach and Dr. Stock came often, spending many late afternoons, evenings, and week-ends here studying the La Brea mammals, the cave material, and keeping a general lookout for the welfare of paleontological work at the Museum. In 1931 he was advanced to the position of Curator of Vertebrate Paleontology, and in 1944, as Senior Curator, was put in charge of the Section of Earth Sciences. He was constantly aware of the possibility that his association with two institutions—here and at the California Institute—might result in a show of favoritism to one or the other. The complete fairness with which he handled affairs in both places is attested by the feeling of amity and cooperation which he built up between them.

In 1935, Dr. Stock was married again, to Margaret Gardner Wood, associated with the administrative offices of the California Institute. Acquainted with the program which Dr. Stock had undertaken at the Institute, and interested in his work, Mrs. Stock became a great help to him in furthering his endeavors. In 1942 his youngest child, James Ellery, was born.

Dr. Stock's part in Museum affairs became increasingly significant as plans proceeded for the development of Rancho La Brea as Hancock Park. At the end of the war, he was eager to push ahead with the work which had been so long delayed. Preliminary to the erection of the Pit Observation Station, to surround a partially excavated pit where bones could be shown in place, he instituted a program of test-hole digging to ascertain the best location. Over one hundred machine-drilled test holes were made, and from these one fruitful location was selected as the site for the Station. Working with the County Fathers, Stock laid before these gentlemen the hopes he had for making of the park a truly great scientific monument. The project was laid out in yearly steps and the work begun. After months of work and worry, the plans began to take shape, pathways were laid, the Observation Station was built. The afternoon of the day before his death was spent in conference with the Director of the Museum and the architects at work on the next big undertaking to complete the park, the development of the landscaping, and ultimately the erection of a Geological Museum to house the entire collection of Rancho La Brea fossils.

It is lamentable that Dr. Stock could not have lived to see the completion of his dream. The Museum, however, is bending every effort to see that the plans for which he worked shall be expedited. And to this end a committee has been formed to raise private funds to assure the building of the Geological Museum as a memorial to Chester Stock.

—Hildegarde Howard

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